

SR 97 SATUS CREEK CED RETROFIT

FEBRUARY 28, 2005

INTRODUCTION

The Satus Creek retrofit project is located within the Yakama Indian Reservation along State Route (SR) 97. SR 97 is a main transit route for local and commercial traffic. The Yakama Nation approached WSDOT about conducting a bridge replacement at this site.

THE CED PROBLEM

The Satus Creek bridge crossing is notorious for repetitive scour and debris jamming problems, both of which negatively impacted fish habitat. Because of the repetitive nature of the habitat impacts the project was nominated for inclusion as a CED.

FISH UTILIZATION & HABITAT AVAILABILITY

The Satus Creek system supports Coho, Fall Chinook, Spring Chinook, and Summer Steelhead. The habitat concerns are mainly focused on steelhead because this creek is one of the primary contributors to Steelhead populations in the region.

RETROFIT PROJECT

The reach analysis of the sites consisted of a geomorphic analysis of historical channel migration patterns. This analysis was carried out with two goals in mind

1. To identify the channel migration zone, and
2. Identify relatively stable reaches for potential bridge location.

The analysis indicated two potential locations for the new bridge, and determined prospective bridge lengths appropriate to the geomorphic trends for each site. (see map)

On the basis of the analysis a new site was selected for a 500-foot replacement bridge along the proposed alignment.

This project is scheduled to be constructed during the 07-09 biennium. It is anticipated that the outcome of the new bridge will result in meeting the necessary requirements to protect SR 97 and provide environmental enhancements along this reaches.



Figure 1. Satus Creek bridge abutments.

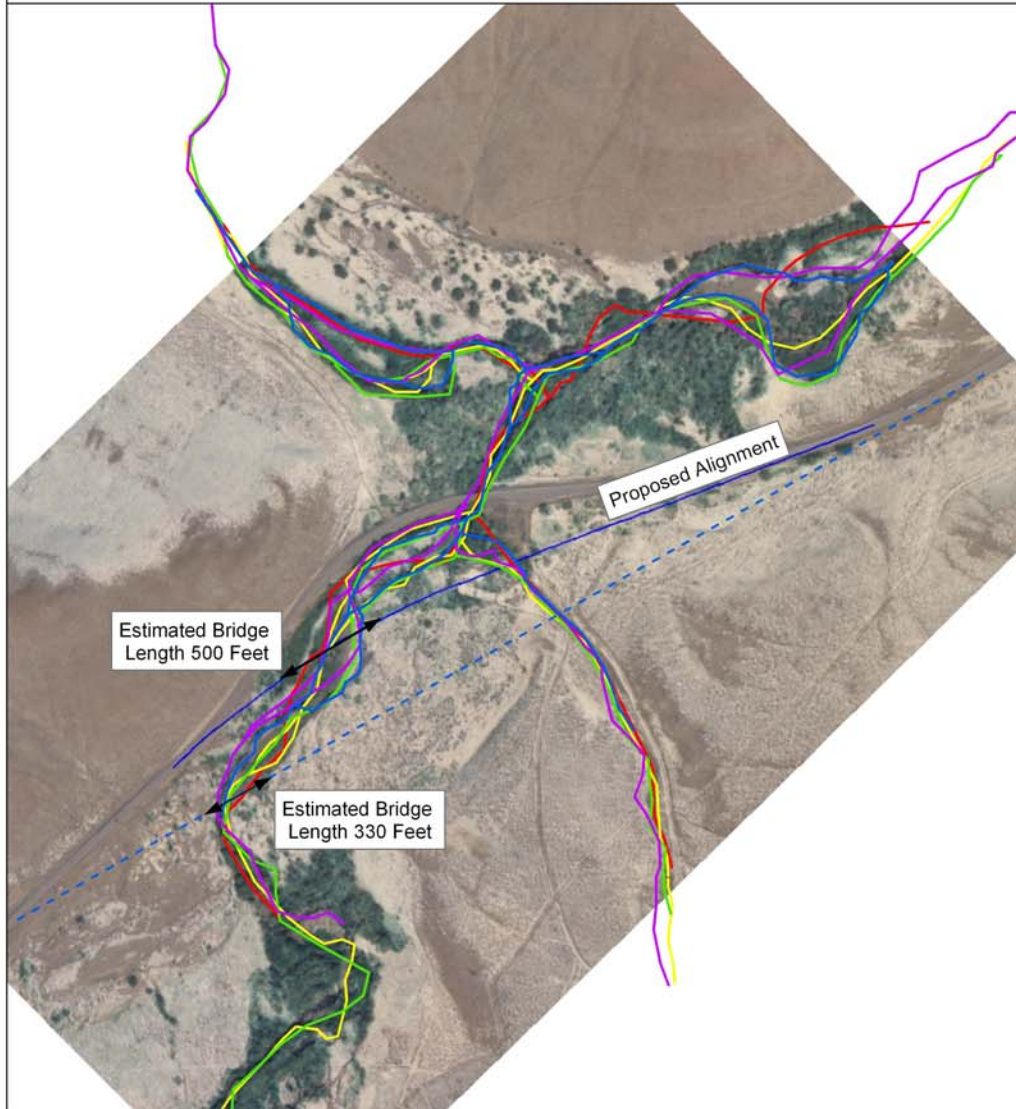


Figure 2. Debris jam against bridge.



Figure 3. Debris jam under bridge.

SR 97 Satus Creek Re-alignment



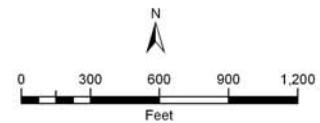
Environmental Services Office
Washington State Dept. of Transportation
Olympia, WA

Data Sources: 2002 Air Photo from WSDOT;
Channel 2002, 1997, 1991, 1979 and 1966
derived from WSDOT air photos.

Lambert Conformal Conic Projection,
Washington State Plane
North American Datum 1983

kap: satus_creek.mxd

-  Alternate Alignment
-  Channel 2002
-  Channel 1997
-  Channel 1991
-  Channel 1979
-  Channel 1966



March 5, 2004



Washington State
Department of Transportation